



SIMATIC DP, ET 200ECO PN, 16 DI 24 V DC; 8xM12, duplicate assignment; Degree of protection IP67

Figure similar

General information	
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0306H
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
power supply according to NEC Class 2 required	Yes
Input current	
Current consumption, typ.	100 mA
from supply voltage 1L+, max.	4 A
Encoder supply	
Number of outputs	8
24 V encoder supply	
<ul style="list-style-type: none"> <li>Short-circuit protection</li> </ul>	Yes; Electronic
<ul style="list-style-type: none"> <li>Output current, max.</li> </ul>	100 mA; per output
Power loss	
Power loss, typ.	6.5 W
Digital inputs	
Number of digital inputs	16
<ul style="list-style-type: none"> <li>in groups of</li> </ul>	2
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 60 °C, max.	16
Input voltage	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>for signal "0"</li> </ul>	-3 to +5V
<ul style="list-style-type: none"> <li>for signal "1"</li> </ul>	+11 to +30V
Input current	
<ul style="list-style-type: none"> <li>for signal "1", typ.</li> </ul>	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	typically 3 ms
— at "1" to "0", max.	typically 3 ms
Cable length	
<ul style="list-style-type: none"> <li>unshielded, max.</li> </ul>	30 m
Encoder	

<b>Connectable encoders</b>	
<ul style="list-style-type: none"> <li>• 2-wire sensor <ul style="list-style-type: none"> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul> </li> </ul>	Yes 1.5 mA
<b>Interfaces</b>	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
<b>1. Interface</b>	
<b>Interface types</b>	
<ul style="list-style-type: none"> <li>• M12 port</li> <li>• integrated switch</li> </ul>	Yes Yes
<b>Interface types</b>	
<b>M12 port</b>	
<ul style="list-style-type: none"> <li>• Autonegotiation</li> <li>• Autocrossing</li> <li>• Transmission rate, max.</li> </ul>	Yes Yes 100 Mbit/s
<b>Protocols</b>	
Supports protocol for PROFINET IO	Yes
PROFINET CBA	No
PROFIsafe	No
<b>PROFINET IO Device</b>	
<b>Services</b>	
<ul style="list-style-type: none"> <li>— IRT with the option "high flexibility"</li> <li>— Prioritized startup</li> </ul>	Yes Yes
<b>Redundancy mode</b>	
<b>Media redundancy</b>	
<ul style="list-style-type: none"> <li>— MRP</li> </ul>	Yes
<b>Open IE communication</b>	
<ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• SNMP</li> <li>• DCP</li> <li>• LLDP</li> <li>• ping</li> <li>• ARP</li> </ul>	No Yes Yes Yes Yes Yes
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>	Yes
<b>Diagnoses</b>	
<ul style="list-style-type: none"> <li>• Diagnostic information readable</li> <li>• Monitoring the supply voltage</li> <li>• Wire-break in signal transmitter cable</li> <li>• Short-circuit encoder supply</li> <li>• Group error</li> </ul>	Yes Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED
<b>Potential separation</b>	
between the load voltages	Yes
between load voltage and all other switching components	No
between Ethernet and electronics	Yes
<b>Potential separation channels</b>	
<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	No
<b>Isolation</b>	
<b>tested with</b>	
<ul style="list-style-type: none"> <li>• 24 V DC circuits</li> <li>• Test voltage for interface, rms value [Vrms]</li> </ul>	707 V DC (type test) 1 500 V; According to IEEE 802.3
<b>Degree and class of protection</b>	
IP degree of protection	IP65/67
<b>connection method / header</b>	
Design of electrical connection	4/5-pin M12 circular connectors
<b>Dimensions</b>	

Width	60 mm
Height	175 mm
Depth	49 mm
<b>Weights</b>	
Weight, approx.	910 g

**last modified:** 10/25/2021 